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About this Guide Book

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Statement

This guide book will help you understand the installation of the product better. It is reminded that the product shall be used strictly complying with this guide book. User's operation failing to comply with this guide book may result in malfunction or accident for which PT. SINKO PRIMA ALLOY (called SINKO/manufacturer afterward) can not be held liable.

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Responsibility of the Manufacturer

The manufacturer only considers itself responsible for any effect on safety, reliability and performance of the equipment if:

- Assembly operations, extensions, re-adjustments, modifications or repairs are carried out by persons authorized by the manufacturer, and
- The electrical installation of the relevant room complies with national standards, and
- The instrument is used in accordance with the instructions for use.

The manufacturer will make available on request circuit diagrams, component part lists, descriptions, calibration instructions, or other information that will assist service personnel to repair those parts of the equipment that are designated by the manufacturer as repairable by service personnel.

Terms Used in this Guide Book

This guide is designed to give key concepts on safety precautions.

NOTE

A **NOTE** provides useful information regarding a function or a procedure.

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Setup of Your Computer

Chapter 1 Setup of Your Computer

1.1 Installing the Operating System

Please refer to the *MFM-CMS Central Monitoring System User Manual* and install the corresponding Windows OS on your computer.

1.2 Hard Disk Partition

The hard disk should be partitioned during or after the installation of the operating system. Please divide the hard disk into three partitions: (C :), (D :) and (E :) partitions.

Partition C with a size of 50 GB is the system partition for the OS and the MFM-CMS program. **Partition E** with a size of 50 GB is the backup partition for backing up the data of the OS. If another way of backup is adopted, it is not necessary to have this partition. **Partition D** is for data storage. You can distribute the memory portion to this partition based on the total volume of your hard disk. Sufficient capacity (400 G) of this partition is a recommendation. Total volume of 500 GB for your hard disk is recommended.

NOTE:

All the images in this guide book are based on Windows 7. Different operating systems may vary in the display content.

1.3 Hardware Driver

To ensure the MFM-CMS can run normally, you should install the network adapter, video adapter, audio adapter

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Setup of Your Computer

as well as their respective drivers on your computer prior to the installation of the software; otherwise, the system cannot be started.

- If the driver for the network adapter is not installed, the system cannot be connected to the bedside monitors; thereby, the system cannot play the part of monitoring.
- If the driver for the video adapter is not installed, the system display will be abnormal and delay will occur when refreshing data.
- If the driver for the audio adapter is not installed, the system cannot play the alarm sound and thus fails to indicate an alarm in the audio way.

1.4 Installing the Printer

To perform the printing function of the MFM-CMS software, you have to install a printer prior to use. The HP LaserJet series printers are recommended. If you want to export PDF files, please install a PDF printer software. The software PDF Creator is recommended.

NOTE:

If no printer is installed, the function of printing or preview will be disabled.

1.5 Double Displays

Two displays accompanied with dual video adapters (or a video adapter supporting double displays) are needed if you want to monitor with two display screens. Also, please make sure the two displays are of the same brand, the

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same type and set with the same resolution. You may refer to the user manual for more information about the display.

After the video adapter is equipped, please install the corresponding driver and select **Extended Desktop** as the desktop mode as Figure 1-1 shows.

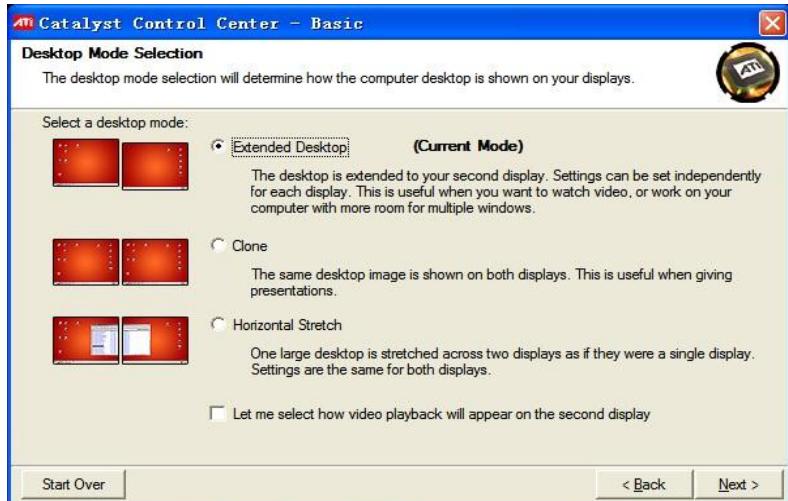


Figure 1-1

NOTE:

- 1 The video adapter used for demonstration here is the ATI video adapter. If you use a video adapter of another brand or another type, please make a similar setup when installing the driver for the video adapter.
- 2 If a wrong desktop mode is selected, the MFM-CMS software may fail to boot up, or only a single display is available.

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- 3 On Windows 10 or newer, User can press Alt+D to set up display mode selection.

After finishing the installation of the driver for the video adapter, please restart the software and you can monitor with double displays.

1.6 Network Setup

NOTE:

Please make sure the network adapter as well as the corresponding driver has been installed in the computer prior to network setup, or you may not go on with the setup.

1. Set the IP address of the computer in which the MFM-CMS software is installed:

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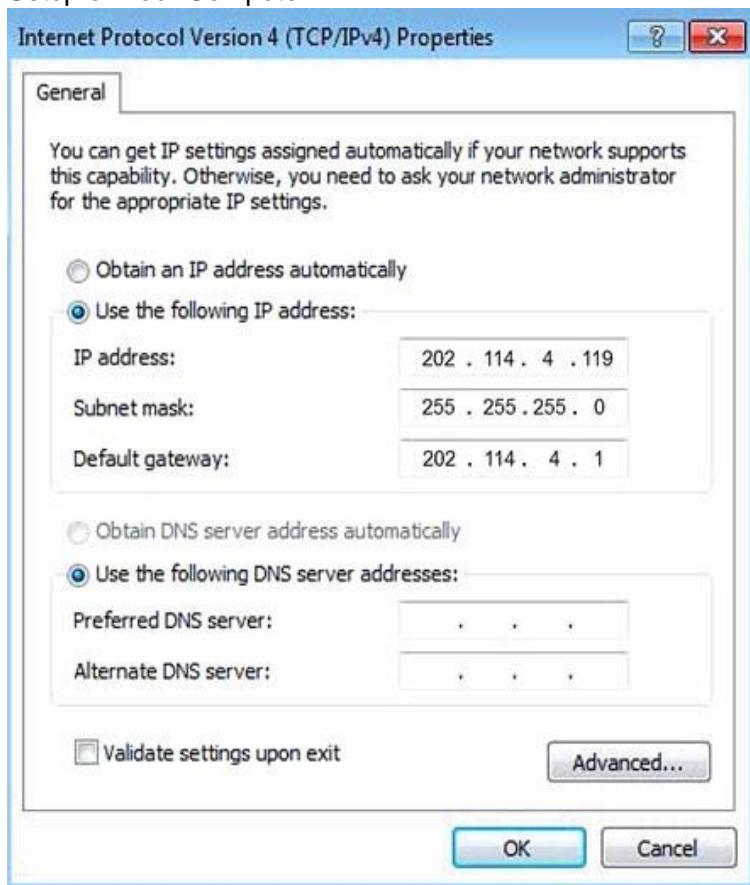


Figure 1-2 IP Configuration on Host Computer

2. Set the IP address of the monitor server. For example, if you have set the IP address of the computer to 202.114.4.119 (Figure1-2), accordingly, you have to set the IP address of the monitor server to 202.114.4.119. **IP addresses shown here are for illustration purposes, please set up according to your internet service provider's IP.**

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NOTE:

If multiple monitors are simultaneously connected to the same MFM-CMS, please make sure all these monitors share the same server. Different monitors cannot share the same IP address; otherwise some monitors cannot be connected to the MFM-CMS. For iM8 iM9 series, **Local Net NO** in **User Maintain** is the last number of Monitor IP; **Server IP** is the IP address of MFM-CMS.

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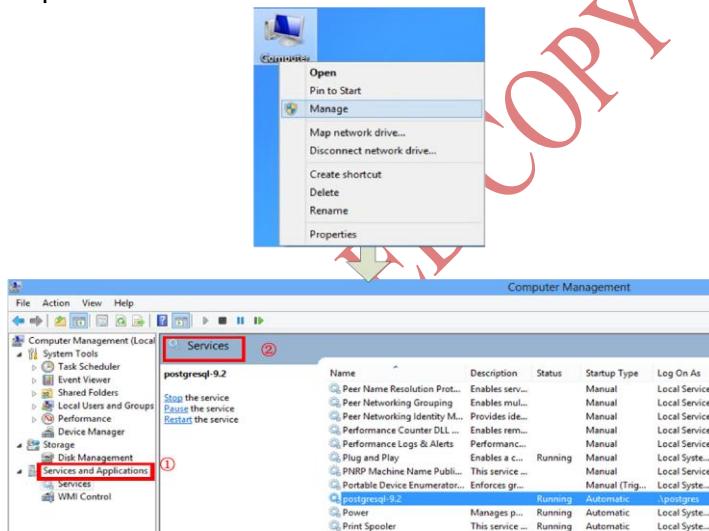
MFM-CMS Central Monitoring System Installation Guide

Installing the MFM-CMS Software

Chapter 2 Installing the MFM-CMS Software

Attention for installing [essential]

1. Check current MFM-CMS data base version. Click 'Computer' > 'Manage' > 'Services and Applications' > 'Services' > Find 'postgresql-8.3' or 'postgresql-9.2' as pictures below. If 'postgresql-9.2' appears, click it and MFM-CMS will be installed directly. Otherwise, see step 2.



2. If postgresql-8.3 is current MFM-CMS data base version:

Boot up and enter MFM-CMS > Enter into **User Maintain** interface > Click **Database Maintain**, and backup current data. For details about data back-up, please refer to *MFM-CMS central monitoring system user manual*.

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Installing the MFM-CMS Software

3. After finishing data backup, uninstall MFM-CMS and delete the file (named CMS_DB) in data installation path (D disk is the default).
4. After finishing the actions above or if **postgresql-8.3** or **postgresql-9.2** are unavailable, you can install MFM-CMS.



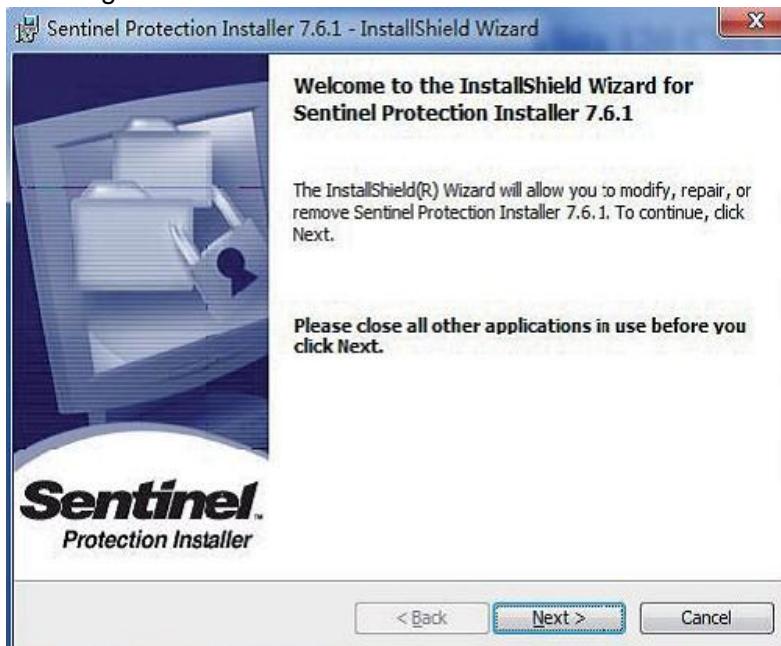
Figure 2-1 Setup Interface of MFM-CMS

Install the MFM-CMS software following the steps below:

- 1 Plug in flash drive or insert CD to CD Drive, open **Setup.exe** and a window as seen on Figure 2-1 will be shown. You might need to **Run as Administration** for successful installation.
- 2 Click on **USB SENTINEL** to install the driver for the watchdog. Complete the installation following the onscreen instructions.

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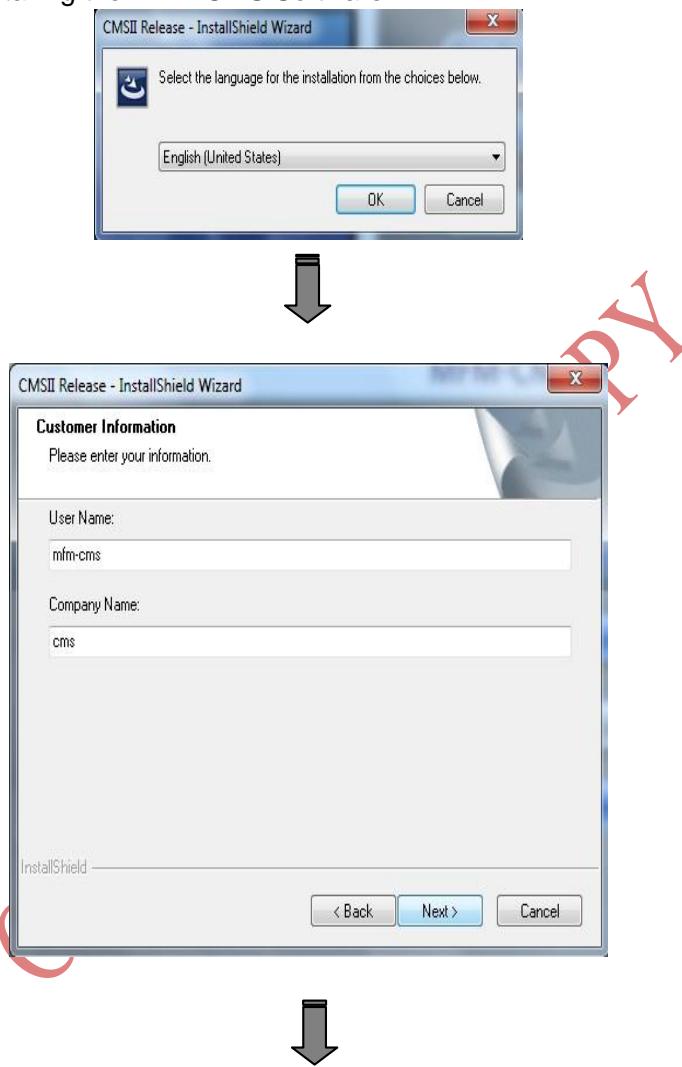
Installing the MFM-CMS Software



- 3 To install the MFM-CMS software, click on **MFM-CMS** and install the software step by step.

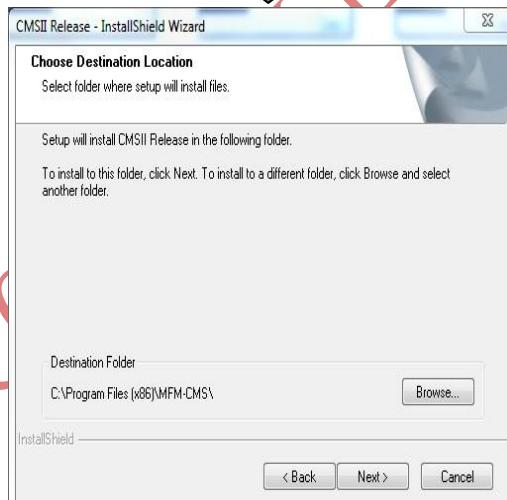
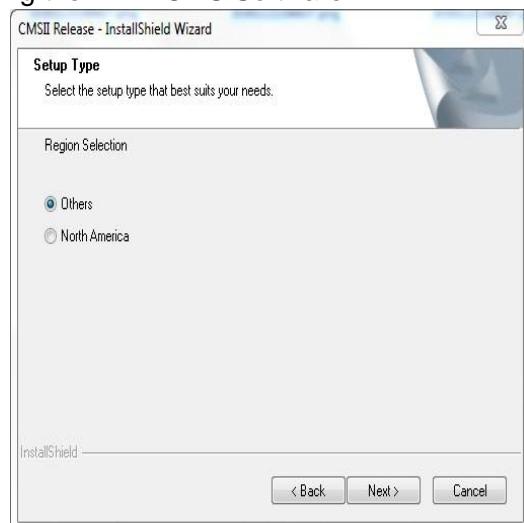
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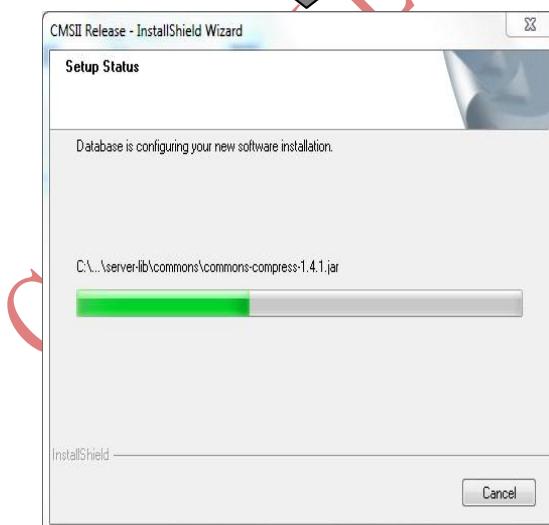
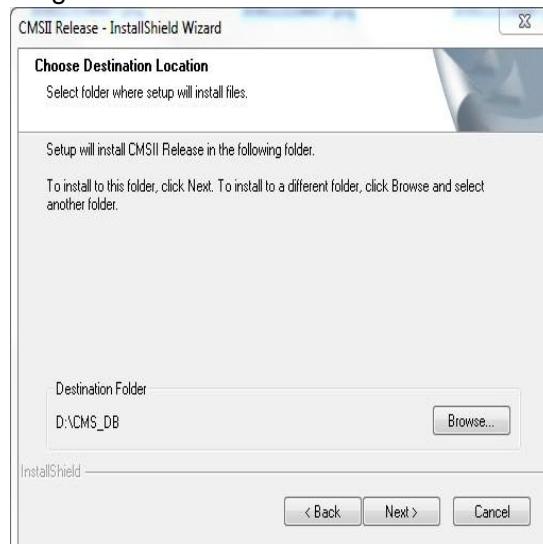
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Installing the MFM-CMS Software



```
C:\Windows\system32\cmd.exe
processed file: D:\CMS_DB\data\base\1922\1\1837
processed file: D:\CMS_DB\data\base\1922\1\1838
processed file: D:\CMS_DB\data\base\1922\1\1840
processed file: D:\CMS_DB\data\base\1922\1\1842
processed file: D:\CMS_DB\data\base\1922\1\1843
processed file: D:\CMS_DB\data\base\1922\1\1844
processed file: D:\CMS_DB\data\base\1922\1\1845
processed file: D:\CMS_DB\data\base\1922\1\1846
processed file: D:\CMS_DB\data\base\1922\1\1846.vn
processed file: D:\CMS_DB\data\base\1922\1\1848
processed file: D:\CMS_DB\data\base\1922\1\1850
processed file: D:\CMS_DB\data\base\1922\1\1851
processed file: D:\CMS_DB\data\base\1922\1\1852
processed file: D:\CMS_DB\data\base\1922\1\1852.fan
processed file: D:\CMS_DB\data\base\1922\1\1852.vn
processed file: D:\CMS_DB\bin\xmns02u.stc_vc_custom.dll
processed file: D:\CMS_DB\bin\xmns02u.vn
processed file: D:\CMS_DB\data\base\1199\1\1998
processed file: D:\CMS_DB\data\base\1199\1\1998.vn
processed file: D:\CMS_DB\data\base\1199\1\1999
processed file: D:\CMS_DB\data\base\1199\1\1999.vn
processed file: D:\CMS_DB\data\base\1638\1\1845
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Abidjan
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Abidjan.out
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Douala
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\El_Aaiun
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Freetown
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Gaborone
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Harare
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Juba
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Luanda
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Maputo
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Nairobi
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Porto_Novo
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Sao_Tome
processed file: C:\Program Files (x86)\MFM-CMS\DB_8.3\share\timezone\Africa\Windhoek
```



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Installing the MFM-CMS Software

NOTE:

- 1 The system will indicate you to restart your computer after completing the installation of the software. If there are no other hardware drivers or software needing to be installed, please restart your computer. The MFM-CMS program will automatically run after restart.
- 2 Please restart the computer to validate the installed hardware drivers. If you directly run the MFM-CMS program without rebooting the computer, the video adapter, audio adapter, network adapter, main board, watch dog or other hardware may not be identified, and the MFM-CMS software will therefore fail to boot up.
- 3 If any antivirus software or defending software is installed on your computer, a dialog box about Windows Security Alert may pop up when you run the MFM-CMS software at the first time. Please click on **Unblock**.

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Installing the MFM-CMS Software



Figure 2-2

- 4 After installation, do not modify or delete any file in the directory where the MFM-CMS software and the database are installed, or unanticipated mistakes may result.
- 5 For a 64-bit version of Window 7 operating system, the system will produce compatibility files in the directory where the MFM-CMS software is installed. Refer to Figure 2-3. The uninstaller will not automatically delete these compatibility files when you uninstall an earlier version of MFM-CMS software for software upgrading. Therefore, before you install a later version of MFM-CMS software, you have to manually delete these

MFM-CMS Central Monitoring System Installation Guide

Installing the MFM-CMS Software

compatibility files in the installation directory.

Otherwise, an unknown error may occur.

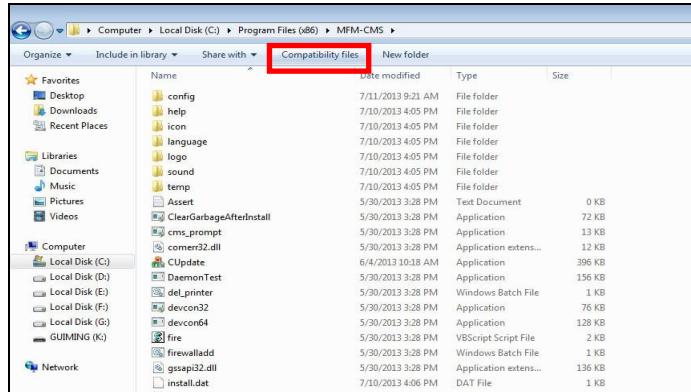
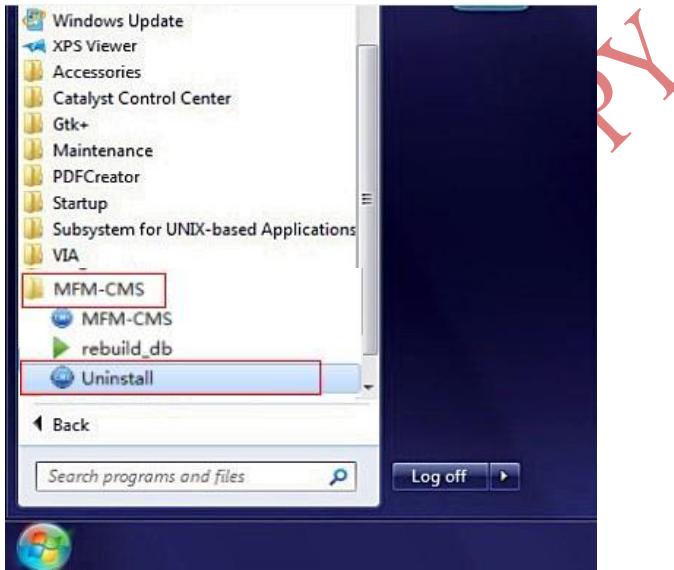


Figure 2-3

Chapter 3 Uninstalling the MFM-CMS Software

Two alternatives are available for uninstalling the MFM-CMS software.

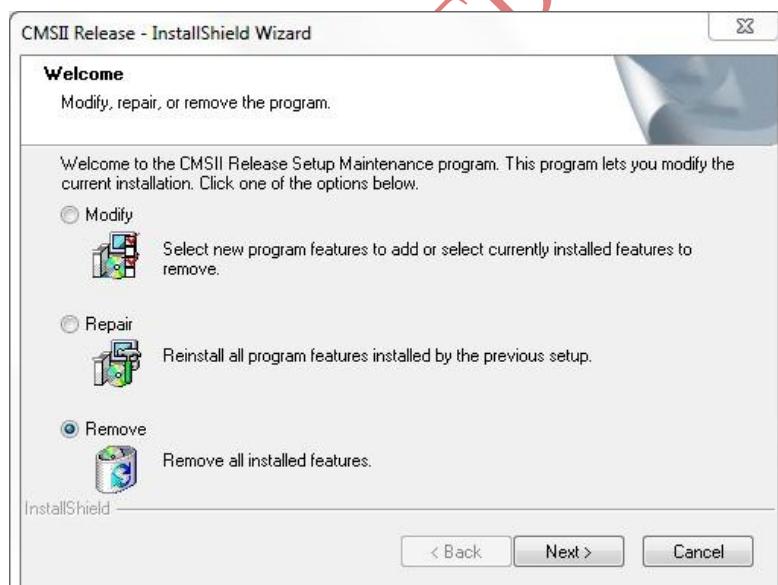
Method 1: Choose **Start > All Programs > MFM-CMS > Uninstall** to uninstall the software.



Method 2: Choose **Start > Control Panel > Programs > Programs and Features** and select the MFM-CMS program to uninstall it.

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Uninstalling the MFM-CMS Software



Chapter 4 Restoring MFM-CMS Software

- The MFM-CMS software of an old version should be uninstalled before upgrading the software to a new version.
- If malfunction in the MFM-CMS software occurs due to causes such as hard disk damage resulting from abnormal power cut-off and so on, you have to reinstall the MFM-CMS software. Prior to reinstallation, please uninstall the old software.
- If the Windows system is corrupted due to causes such as hard disk damage resulting from abnormal power cut-off and so on, you have to reinstall the operating system and likewise the MFM-CMS software.
- To restore the database, you may choose **Start > All Programs > MFM-CMS > Run rebuild_db**. (In the Windows 7 system, you must right-click on the program and choose **Run as administrator** to run the script, or the operation will fail.)

NOTE:

Restoring the MFM-CMS software will cause user data loss.

Installing the CMS-WEB Software

Chapter 5 Installing the CMS-WEB Software

5.1 Installing CMS-WEB

1. Click on **CMS Web** to begin installation of the software as shown below:



2. All the components for CMS-Web will be installed automatically.
3. After the components are installed, you can begin the installation of CMS-WEB. Follow the instructions to complete the installation.

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Installing the CMS-WEB Software



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Installing the CMS-WEB Software



Installing the CMS-WEB Software

5.2 Environment Preparation

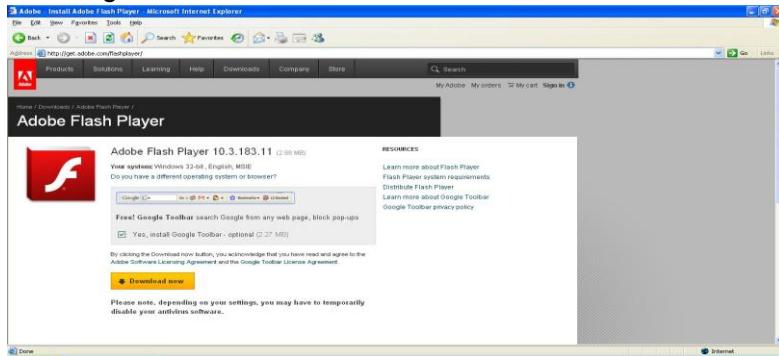
Operation of the CMS-WEB is based on the widely used Flash Player. The required minimum version of Flash Player is 10.0. In most cases, users can access the CMS-WEB by entering the IP address into the address bar of the browser. Assume that the IP address of the CMS-WEB server is 192.168.11.138, and you should use the address <http://192.168.11.138/MFM-CMS/> (either small letters or capital letters) for access. If Flash Player has not been installed, a message page will pop up as follows:



Click on the hyperlink on the page, and you will enter the download page for Adobe Flash Player similar to the following page. Follow the instructions to install the plug-in of Flash Player. In order to download Adobe Flash Player, the user has to make sure the computer has an internet connection.

MFM-CMS Central Monitoring System Installation Guide

Installing the CMS-WEB Software



Configuring Windows Firewall

Chapter 6 Configuring Windows Firewall

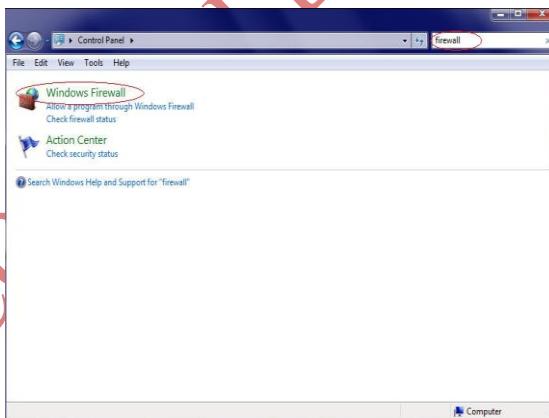
You have to configure Windows Firewall after installing the CMS-WEB so that data sent by the CMS-WEB will not be blocked by it.

The **Inbound Rules** all should be set for following two **Name**:

- a. Name: IIS, Port: 80
- b. Name: Flex, Port: 2010

Please refer to the detailed setting steps for each **Name**:

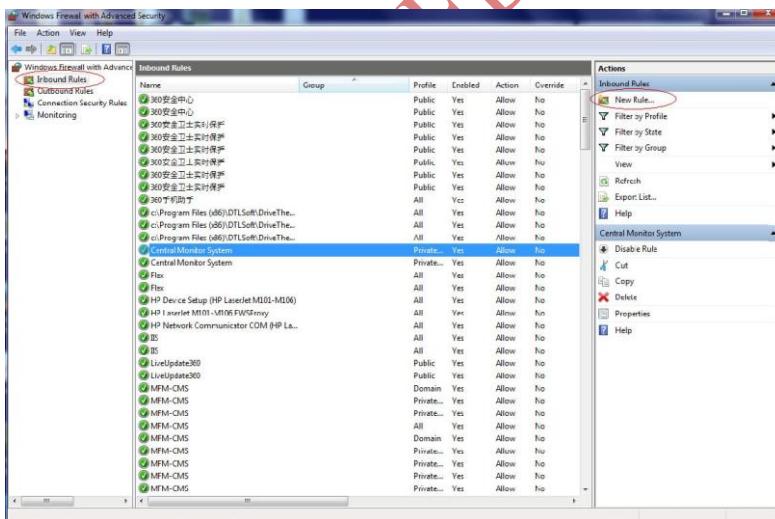
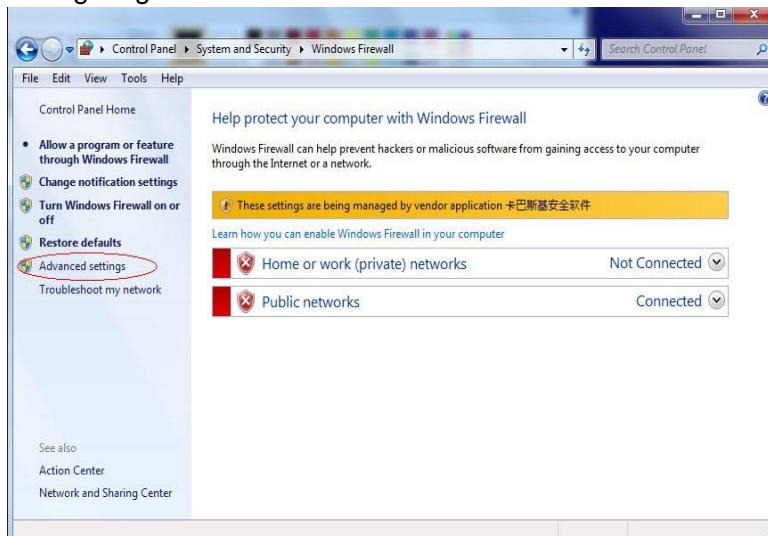
1. Enter **Control Panel**.
2. Click **Windows Firewall** to firewall setting window.



3. Click **Advanced Settings > Inbound Rules > New Rule**.

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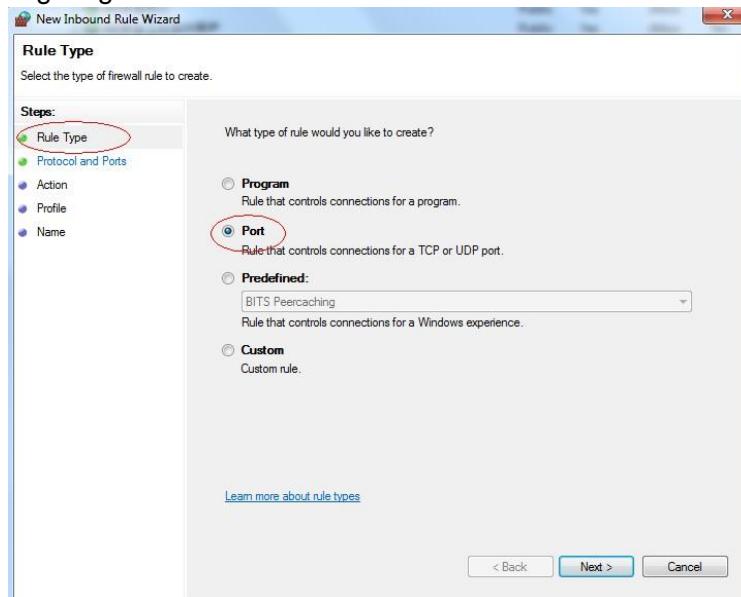
Configuring Windows Firewall



4. Click Rule Type > Port.

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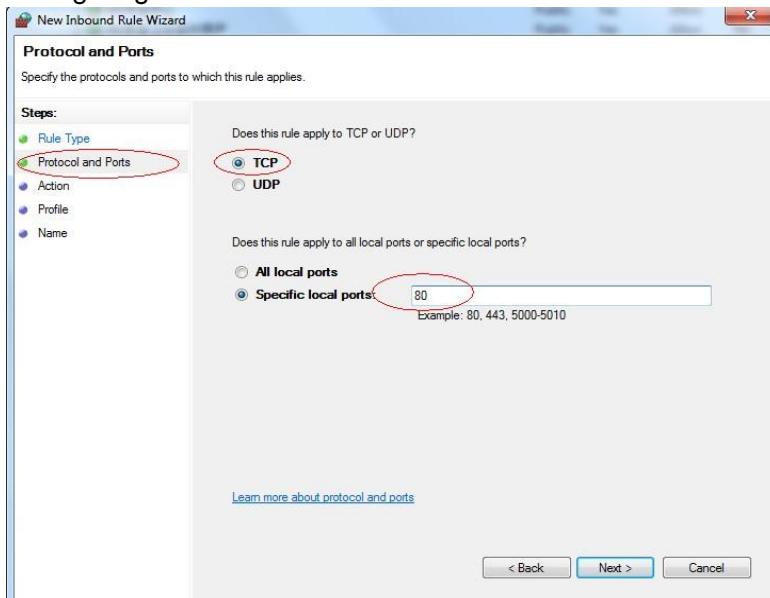
Configuring Windows Firewall



5. Click **Protocol and Ports** > **TCP** > Set **Specific local ports** (e.g. 80 or 2010).

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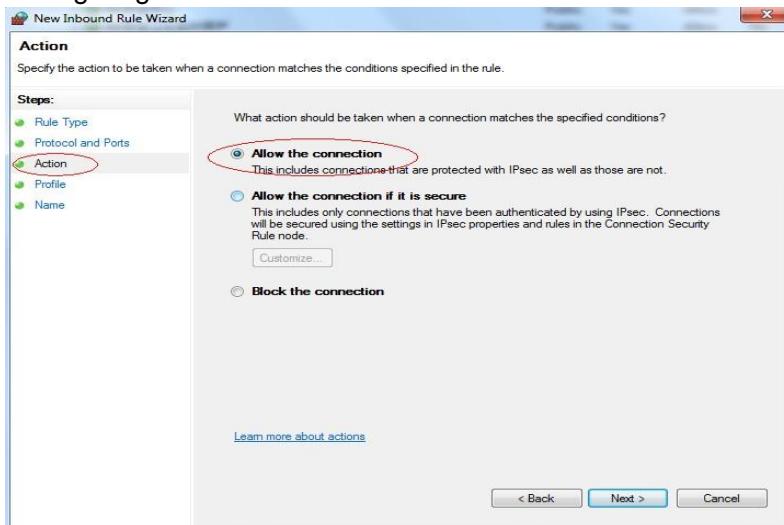
Configuring Windows Firewall



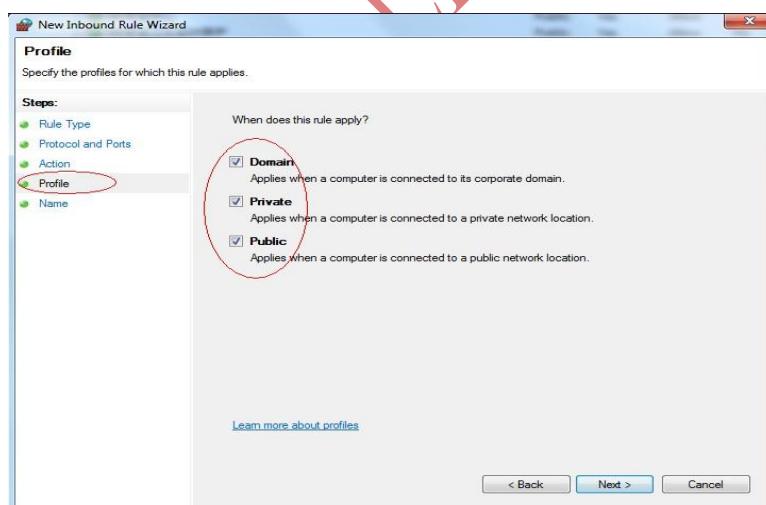
6. Click **Action > Allow the connection**.

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Configuring Windows Firewall



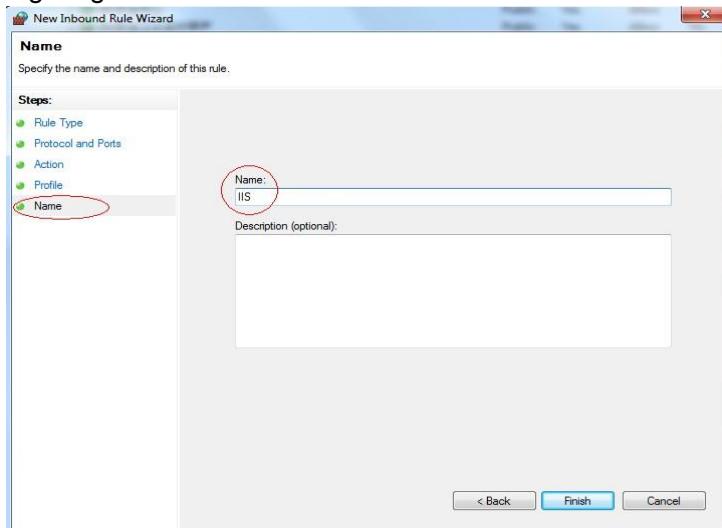
7. Click **Profile** > tick all options.



8. Set **Name** (e.g. IIS or Flex).

MFM-CMS Central Monitoring System Installation Guide

Configuring Windows Firewall



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Chapter 7 Uninstalling the CMS-WEB Software

Choose **Start > Control Panel > Add or Remove Programs** and select the MFM-Web program to uninstall it.

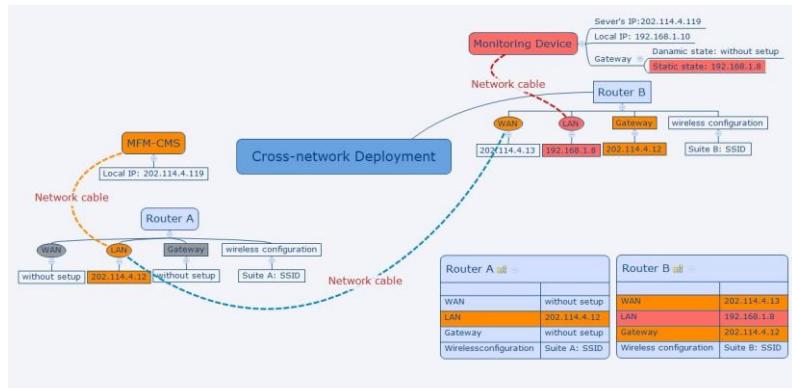
Click on **Yes** to confirm the uninstallation.

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Cross-network Deployment

Chapter 8 Cross-network Deployment

If the connection between monitoring device and MFM-CMS adopts cross-network deployment, router A and router B will be in different net segments. For example, segment A is 202.114.4.*; Segment B is 192.168.1.*.



8.1 Setup for Monitoring Device

After network installation finished, setting correct gateway for monitoring device is needed. The points below should be followed:

- Set IP for monitoring device to make monitoring device and Router B have the same network segment.
- Set gateway for monitoring device to make it same as IP of Router B. The method is: **Menu > Maintain > User Maintain > Network Maintain > Configuration > GW**

Cross-network Deployment

8.2 Setup for MFM-CMS

After network installation finished, set IP for MFM-CMS to make MFM-CMS and Router A have the same network segment.

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Central Monitoring System

MFM-CMS

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Quick Installation Guide

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